



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
---------------	-------------	----------------------	---------------------

07/870,337 04/17/92 PERSSON

E 027500-386

EXAMINER

VD, N

ART UNIT

PAPER NUMBER

12

2611

DATE MAILED:

03/10/94

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 12-22-93 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 03 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/>   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-15 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-15 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

1. Applicant's arguments with respect to claims 1-15 have been considered but are deemed to be moot in view of the new grounds of rejection based upon the recently issued U.S. Patent No. 5,267,261 (Blakeney, II et al). Since the just-mentioned patent was not available at the time the previous Office action was made, the examiner regrets any delay which may be associated with this non-final Office action.

2. Claims 1-6, 9-13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, the preamble of claim set forth a method of transferring communication with a mobile station from a first to second base station. The body of claim, however, fails to show how such transferring can be completely performed. For that reason, the claimed invention is incomplete (applicant must show at the end of the claim how or when the mobile station selects the second base station as its base station, after the mobile station produces first and second demodulated signals).

As to claims 2, 10, they are analyzed with the same reasons as set forth in claim 1. In addition, it is not clear for what purposes a "first traffic signal", a "control message", a "second traffic signal" are transmitted.

Art Unit 2611

As to claim 9, the recitation "a base station code" should be changed to --a base station code for identifying said selected base station--.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 7-9, 14-15 are rejected under 35 U.S.C. § 102(e) as being anticipated by Blakeney, II et al.

As to claim 7, Blakeney, II et al disclose a cellular telephone system comprising steps of "decoding at the mobile station" (see column 13 lines 35-65, column 27 lines 11-47), "transmitting a signal from said mobile station the signal strength indications" (see column 4 lines 1-14, column 27 lines 15-39), "receiving the signal strength indications at one of the base stations" (see column 4 lines 5-10), "processing the indicated signal strengths at the network controller" (see column 14 lines 10-14).

As to claims 8, 15, with respect to an "access code" see Blakeney, II et al column 26 lines 59-66.

As to claims 9, 15, with respect to "base station code" and "traffic channel code" see Blakeney, II et al column 19 lines 24-42.

As to claim 14, see Blakeney, II et al figure 1 numerals 12, 14, 16 for "first and second base stations"; 18 for "remote unit". See figure 2, numerals 34 for "signal processing means"; 34 for "analog to digital conversion means" (also see column 12 lines 61-63); 46, 40, 42 for "CDMA processing means"; 50, 52 for "encoder means"; 38, 36, 30 for "CDMA transmitting means".

5. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

6. Claims 1-6, 10-13 are rejected under 35 U.S.C. § 103 as being unpatentable over Blakeney, II et al.

Blakeney, II et al disclose a **soft** handoff apparatus and method comprising limitations of "first and second base stations" (see base stations A and B of figures 8-9); "mobile station" 18 (figure 1); "network controller" 10 (figure 1); "first frequency" (see column 30 lines 1-2 for the common pilot signal), first code and second code" (see column 6 lines 17-20 for different code phase offsets, see column 19 lines 25-35); "demodulated first and second signals" (see blocks 42-40 of figure 2, column 13 lines 35-65, column 27 lines 11-12); "signal processing means" 46 (figure 2); "CDMA processing means" 46 (figure 2), "first and traffic signals" (see column lines 23-35), "control message" (see column 19 for hand-off direction message, in-traffic message).

As to claims 1, 2, 10, Blakeney, II et al fail to disclose that the second base station" receives the transfer indication from the first base station (instead, the above transfer indication is generated from the "network controller" in Blakeney, II et al reference as recited on column 3 lines 62-68). However, those skilled in the art would have appreciated that in Blakeney, II et al reference the second base station could receive the transfer indication from either the first base station or network controller. In addition, if the transfer indication is transmitted from the base station instead of network controller, less work is going to be done at the network controller. Therefore, it would have been obvious to one of

ordinary skill in the art to modify Blakeney, II et al reference as recited in the claim, because it would reduce the cost of implementing the network controller.

As to claim 2, Blakeney, II et al fail to disclose that the first and second base stations employ different carrier frequencies. However, it would be appreciated by those skilled in the art that if a minimum frequency bandwidth or a non-interrupted handoff is preferred in Schilling's invention, then the first and second base stations should use the same carrier frequency. Otherwise, if a minimum frequency interference is preferred or one of the two base stations can not provide signals for the mobile station on the frequency employed by another base station, then the different carrier frequencies should be incorporated. Therefore, it would have been obvious to one of ordinary skill to modify Blakeney, II et al reference as recited in the claim, because the frequency interference would be greatly reduced.

As to claim 3, with respect a "first base station code", a "first access code", a "second base station code" and a "second access code", see Blakeney, II et al column 6 lines 23-27, column 19 lines 24-27.

As to claims 11-13, with respect to a "traffic channel code", see Blakeney, II et al reference column 19 lines 3-10, 31-35, 60-64.

Serial No. 870,337

-7-

Art Unit 2611

As to claims 4-6, Blakeney, II et al disclose limitations of "error correcting the demodulation signals" (see column 13 lines 62-65, "diversity combination" (see column 13 lines 54-65).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Vo whose telephone number is (703) 308-6728.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Nguyen Vo *nVo*

March 05, 1994

*Reinhard J. Eisenzopf*  
Reinhard J. Eisenzopf 3-6-94  
Supervisory Patent Examiner  
Group 260